

Explosives and Hazardous Devices Report Writing Guidelines

1 Scope

These procedures set forth guidelines for writing *FBI Laboratory Reports* for explosives and hazardous devices examinations and supplements the practices set forth in the *FBI Laboratory Quality Assurance Manual (QAM)* and the *FBI Laboratory Operations Manual (LOM)*. These procedures apply to caseworking personnel conducting work in explosives and hazardous device analysis.

2 Introduction

FBI Laboratory Reports issued by Explosives and Hazardous Devices Examiners conducting casework in explosives and hazardous devices analysis are designed to summarize analytical findings during the routine analysis of evidence. Due to the wide variety of requests and evidence received, these procedures only provide general guidelines for report writing. It is not possible to anticipate every type of report that may be written and this document is designed to provide examples of common occurrences. It is acceptable to use other wording as long as the results of the examinations are accurately communicated, a description of the methodology used to reach the results is included, limitations are addressed, and wording is approved during the technical review process by an authorized technical reviewer in the category of testing.

3 Procedures

All *Laboratory Reports* containing opinions and interpretations generated by Explosives and Hazardous Devices Examiners will follow the requirements in the *FBI Laboratory Operations Manual* and will contain the “Results of Examination” and “Remarks” sections. The reports will also contain a “Limitations” section.

3.1 Results of Examination

The Results of Examination section contains methods, results, opinions, interpretations, specific limitations associated with individual evidentiary items, as appropriate; and/or conclusions of forensic examinations conducted by the Explosives and Hazardous Devices Examiner. Example wording for examination results can be found in Appendix A.

The following statement(s) will be used in all *Laboratory Reports* detailing the methods used in the examination of evidence:

The methods utilized during the analysis of the evidentiary items included the following, as appropriate:

- visual examinations of observable, physical characteristics;
- visual comparison examinations of observable, physical characteristics;
- microscopical examinations of observable, physical characteristics;
- microscopical comparison examinations of observable, physical characteristics;
- measurements of physical characteristics;
- measurement comparison examinations of physical characteristics;
- visual examinations of photographs;
- visual examinations of x-ray images, and
- reviews of references.

Limitations may include the following, as appropriate:

- If results were limited based on a limited number of components, this will be stated.
- If examinations were limited due to the nature of the packaging of the evidence, this will be stated.
- If examinations were limited by the method used to collect the evidence, this will be stated.

Other specific limitations concerning the results or examinations will be conveyed, as appropriate, for the evidentiary items. This may include interpretive wording to aid the reader in understanding the specific results detailed in this section.

3.2 General Limitations

The following limitations statements will be used in all *Laboratory Reports* containing opinions and interpretations:

- Item source identifications that refer to a specific distributor or manufacturer have not been confirmed with that distributor or manufacturer unless otherwise stated in this report.
- The physical characteristics, such as, but not limited to, material type, shape, and color of all evidentiary items described in the Results of Examination section of this report are based on visual and/or microscopical observations, unless otherwise noted. Other parameters such as, but not limited to, distances, angles, and voltages associated with individual evidentiary items described in the Results of Examination section of this report are based on physical measurements and are approximate, unless otherwise noted. Should a more complete characterization of these items be required, additional examinations can be requested of the appropriate forensic discipline. Diagrams such as, but not limited to, drawings and schematics are not to scale, unless otherwise noted.

The examiner must also convey the general limitations associated with the condition of the explosives and hazardous devices evidence received, as appropriate. This may include interpretive wording to aid the reader in understanding such limitations. Example wording for such limitations can be found in Appendix B.

A similar limitations statement regarding the analysis of the characteristics of evidentiary items must also be included in the *Examination Notes* associated with the report of examination. The following statement must appear on the first page of the *Examination Notes*:

- The physical characteristics, such as, but not limited to, material type, shape, and color of all evidentiary items described in these examination notes are based on visual and/or microscopical observations, unless otherwise noted. Measurements of parameters such as, but not limited to, distances, angles, and voltages are approximate, unless otherwise noted. Diagrams such as, but not limited to, drawings and schematics are not to scale, unless otherwise noted.

3.3 Remarks

The Remarks section will follow the requirements in the FBI *LOM*.

4 References

FBI Laboratory Quality Assurance Manual, Federal Bureau of Investigation, Laboratory Division, latest revision.

FBI Laboratory Operations Manual, Federal Bureau of Investigation, Laboratory Division, latest revision.

Rev. #	Issue Date	History
0	07/15/2011	Original Issue.
1	03/31/2017	Renamed to <i>Explosives and Hazardous Devices Report Writing Guidelines</i> . Changed heading names for sections 1 and 2. Relevant portions of the explosives chemistry discipline copied or moved to the <i>Explosives Chemistry Report Writing Guidelines</i> SOP. Administrative changes for grammar and consistency, including change to “Explosives and Hazardous Devices Examiner.” Section 1 updated. Sections 3, 4, 5, 6, 8, 9, and 10 removed. Section 3.1 wording changed to be consistent with the LOM. Limitations in section 3.1 reworded.
2	10/02/2017	Updated for clarity. Removed reference to the Explosives Unit in the header for consistency with explosives and hazardous devices documents.
3	07/17/2018	Updated Section 3 to include a “Limitations” section in Explosives and Hazardous Devices <i>Laboratory Reports</i> . Updated Section 3.1 to include mandatory wording regarding the methods used in the discipline of Explosives and Hazardous Devices category of testing. Renamed sections to accommodate the new Section 3.2 “General Limitations” that will be included in all Explosives and Hazardous Devices <i>Laboratory Reports</i> . Updated Appendix A for clarity.

Approval

Explosives and
Hazardous Devices
Technical Leader

Redacted - Signatures on File

Date: 07/16/2018

Explosives Unit
Chief:

Date: 07/16/2018

QA Approval

Quality Manager:

Date: 07/16/2018

Appendix A: *Example wording for the Results of Examination section for Explosives and Hazardous Devices Laboratory Reports*

Example results contained in an Explosives and Hazardous Devices Laboratory Report:

Present within the submitted Items 1 - 10 are the disassembled remains of an improvised explosive device (IED), also known as a homemade bomb, or destructive device. The general components of an IED consist of an explosive main charge, a container, and an initiating system, all of which are present in the submitted items. This IED consisted of a low-explosive main charge contained within a copper tube and an electrical initiating system. The initiating system consisted of wire, a 9-volt battery, a mechanical timer, tape, and model rocket engine igniters. This device was concealed inside a lunch-type cooler along with numerous nails which would significantly add to the fragmentation effect of this device. Properly assembled and initiated, this type of device could cause property damage, personal injury or death. A detailed description of the components that comprise this IED is provided hereafter.

The methods utilized during the analysis of the evidentiary items included the following, as appropriate:

- visual examinations of observable, physical characteristics;
- visual comparison examinations of observable, physical characteristics;
- microscopical examinations of observable, physical characteristics;
- microscopical comparison examinations of observable, physical characteristics;
- measurements of physical characteristics;
- measurement comparison examinations of physical characteristics;
- visual examinations of photographs;
- visual examinations of x-ray images, and
- reviews of references.

Appendix B: *Example wording for addressing limitations of Explosives and Hazardous Devices Laboratory Reports based on the condition of the evidence*

Example limitation for a device that did not explode:

Due to the absence or alterations of specific manufacturer or other unique markings on items of evidence, conclusive identifications of the source of an item may not always be effected in every case. Conclusive determinations of the exact design and functioning of a rendered safe or disassembled improvised explosive device may not be effected in every case due to the condition of the components.

Example limitation for a device that functioned as designed:

The explosion and or fire resulting from the functioning of an improvised explosive or incendiary device can cause extensive damage, such as fragmentation, charring or other severe alterations to items of evidence. Due to the destructive nature of these types of energetic events, conclusive determinations as to the recognition and identification of specific device components, as well as the exact design and functioning of the device, may not always be effected in every case.